Detailed Technical Specification of Safety Helmets with Induction Sensor

1.0 Scope:

This specification covers requirements regarding material, construction, workmanship, finish and performance requirement of helmets intended to provide protection against electrical hazards, mechanical impacts from sides and top including falling tools and objects and other hazards while discharging works.

2.0 Material:

a. Outer Shell material shall be HDPE (High density polyethylene)/ABS (Acrylonitrile butadiene styrene).
The Helmet shall be of electrical insulating and shall include Shell and Harness conforming to IS 2925:1984 /EN 397: 2012+A1: 2012/IEC.

c. Color should be High visibility/Golden yellow/ Lemon green with glossy surface

d. Should be universal size 8 point ratchet size adjustment option with a chinstrap. The ratchet rest on the head so as to be comfortable to the user.

e. Crown strap should be of textile material

f. Accessory slots for attachment of cap mounted headgear and torch and other accessories

3.0 Standards and Certifications

- Certification as per IS 2925: 1984
- EN 397:2012 +A1: 2012.

4.0 Marking:

Each helmet (shell and harness) shall be legibly and indelibly marked with the following information:

a) Manufacturer's name or trade mark.

b) Year and month of manufacture.

c) ISI/EN certification mark.

d) Raw material mark

5.0 Branding :

a) 2"x3" Sticker of "BESCOM" logo on front side using good quality ink in peacock blue color.

b) 1"x2" sticker of "Help line 1912" and "Power man" at the rear side using good quality ink in peacock blue colour.

c) Screen printed Reflective strip of more than 6mm shall be around the helmet.

6. Induction Sensor/Voltage Detector:

- Should be detachable electrical Induction Sensor.
- The device should not impact/interfere/invalidate the safety and operation of the safety helmet.
- Indicators and alarms shall.
  a. Provide audio visual alarms & indicate when the device is switched ON.
  b. Provide indication when the device is On/functional & also provide low battery indicator.
  c. When the device is in the induction zone the device should provide visual alarm red colour alarm along with loud audio buzzer of 60 dB when measured from a distance of 2 inches from LT line.
  d. Able to sense 11 KV from a distance of 2mtrs from the energized line and LT line from a distance of 1 mtr from the energized line.
- The device should be operational in harsh working conditions and should provide ingress protection as per IP65 against water and dust.

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